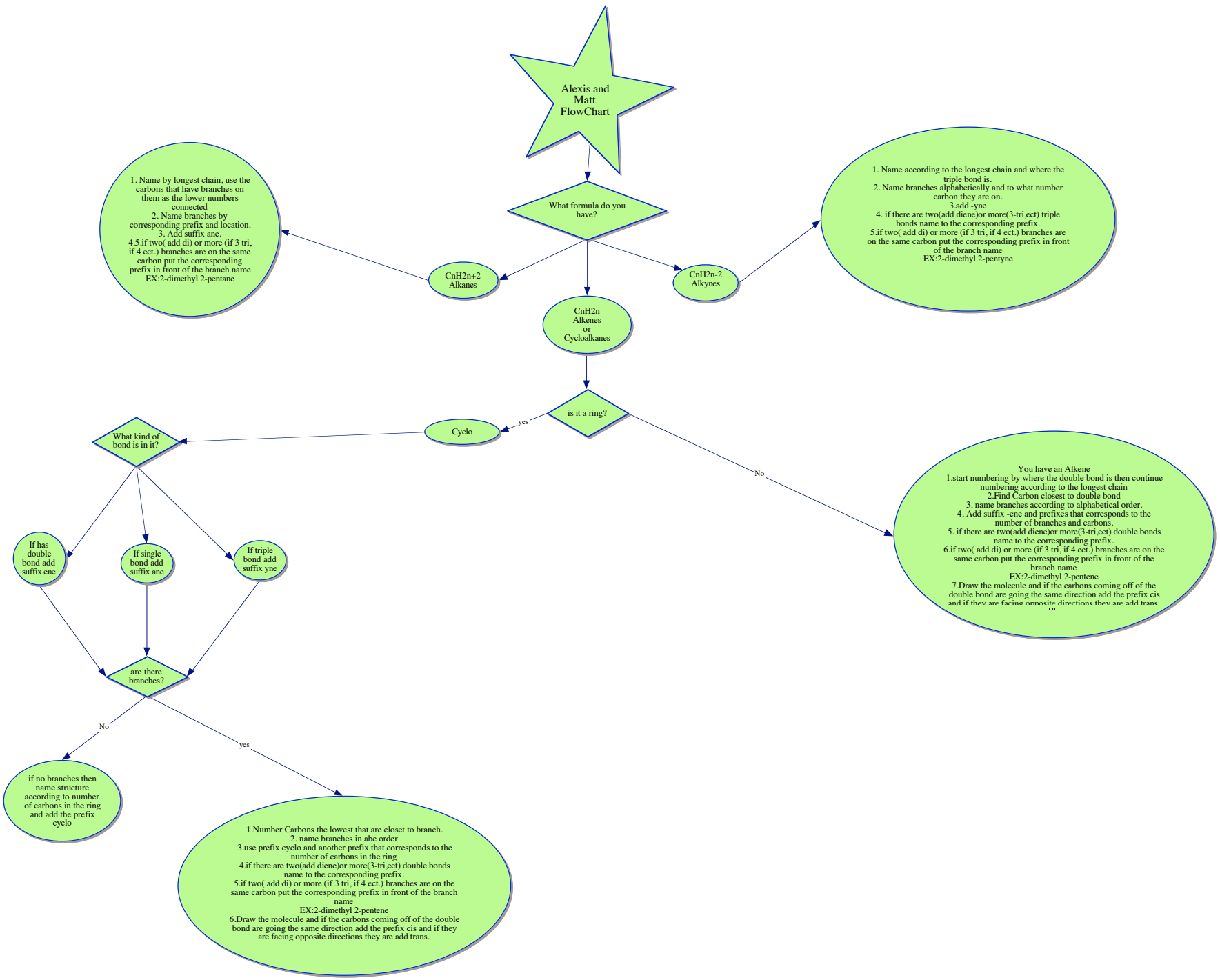
Alexis and Matt FlowChart
What formula do you have?
CnH2n+2 Alkanes
1. Name by longest chain, use the carbons that have branches on them as the lower numbers connected
2. Name branches by corresponding prefix and location.
3. Add suffix ane.
4.5.if two(add di) or more (if 3 tri, if 4 ect.) branches are on the same carbon put the corresponding prefix in front of the branch name
EX:2-dimethyl 2-pentane
CnH2n Alkenes or Cycloalkanes
CnH2n-2 Alkynes
1. Name according to the longest chain and where the triple bond is.
2. Name branches alphabetically and to what number carbon they are on.
3.add -yne
4. if there are two(add diene)or more(3-tri,ect) triple bonds name to the corresponding prefix.
5.if two(add di) or more (if 3 tri, if 4 ect.) branches are on the same carbon put the corresponding prefix in front of the branch name
EX:2-dimethyl 2-pentyne
is it a ring?
yes
Cyclo
What kind of bond is in it?
If has double bond add suffix ene
If single bond add suffix ane
If triple bond add suffix yne
are there branches?
No
if no branches then name structure according to number of carbons in the ring and add the prefix cyclo
yes
1.Number Carbons the lowest that are closet to branch.
2. name branches in abc order
3.use prefix cyclo and another prefix that corresponds to the number of carbons in the ring
4.if there are two(add diene)or more(3-tri,ect) double bonds name to the corresponding prefix.
5.if two(add di) or more (if 3 tri, if 4 ect.) branches are on the same carbon put the corresponding prefix in front of the branch name
EX:2-dimethyl 2-pentene
6.Draw the molecule and if the carbons coming off of the double bond are going the same direction add the prefix cis and if they are facing opposite directions they are add trans.
No
You have an Alkene
1.start numbering by where the double bond is then continue numbering according to the longest chain
2.Find Carbon closest to double bond
3. name branches according to alphabetical order.
4. Add suffix -ene and prefixes that corresponds to the number of branches and carbons.
5. if there are two(add diene)or more(3-tri,ect) double bonds name to the corresponding prefix.
6.if two(add di) or more (if 3 tri, if 4 ect.) branches are on the same carbon put the corresponding prefix in front of the branch name
EX:2-dimethyl 2-pentene
7.Draw the molecule and if the carbons coming off of the double bond are going the same direction add the prefix cis and if they are facing opposite directions they are add trans